

## ELECTRICITY SAFETY (GENERAL) REGULATIONS 2019 – PRESCRIBED ELECTRICAL INSTALLATION WORK EXPLAINED.

18 December 2019

The Electricity Safety (General) Regulations came into effect on 6th December 2019.

For the purpose of Section 45 of the Electricity Safety Act 1998 'prescribed electrical installation work' does not include-

- a) *the **repair or maintenance** of a single component part of an electrical installation; or*
- b) *the **replacement** of a single component part of an electrical installation by an equivalent component part at the **same** location.*

The term 'single component part', means one component part of an electrical wiring system, e.g. one fused mains box, one switch or one circuit breaker/RCD/RCBO on a switchboard assembly.

In effect, Regulation 249(4) allows the repair or maintenance (including replacement) of a single component part of an electrical installation that is classified as prescribed electrical installation work to be excluded from the requirement for a prescribed Certificate of Electrical Safety and electrical inspection.

However, a non-prescribed Certificate of Electrical Safety for any electrical installation work covered by regulation 249(4) is required to be completed and certified by the licensed electrical worker and approved by the responsible person (licensed electrician, technical supervisor etc.).

The responsible person must clearly indicate on the non-prescribed Certificate of Electrical Safety in the description of electrical work that:

**'THIS WORK HAS BEEN CARRIED OUT UNDER THE PROVISIONS OF  
ES(G)R REGULATION 249(4)'**

**Note:** *A responsible person carrying out prescribed electrical installation work which involves the initial installation or subsequent alteration of that work must still issue a Certificate of Electrical Safety at the completion of that work and ensure that the work is inspected by a licensed electrical inspector.*

*The commissioning and periodic testing of electrical equipment which does not involve the physical disconnection of any conductor or component part of an installation such as, residual current device, line isolation monitor, isolation transformer installed in cardiac/body protected areas as per AS/NZS 3003 or a high voltage circuit breaker is not deemed to be electrical installation work.*

The following examples are intended to clarify some of the more common instances where regulation 249(4) may apply and where a non-prescribed Certificate of Electrical Safety must be completed and issued when carrying out this type of electrical installation work.

NP = Non Prescribed certificate of electrical safety.

<b>MAINS CONNECTION BOX (FUSED OR NON-FUSED)</b>	
Repair to cable at a mains connection box.	NP
Repair of cable connection at a mains connection box.	NP
Replacement of a single mains connection box in the <b>same</b> location (e.g. to allow for fascia replacement or wall cladding installation or 55Amp mains connection box with an 80 Amp mains connection box).	NP
Replacement of a single un-fused mains connection box with a fused mains connection box in <b>same</b> location.	NP

<b>CONSUMER'S MAINS – GENERAL (INCLUDING, SUBMAINS OF MULTIPLE INSTALLATIONS)</b>	
Repair to conductor insulation or conductor (e.g. joint in conductor at junction box).	NP
The replacement of a section of consumer's mains (or submains of a multiple installation) by use of a <b>similar wiring system</b> of the <b>same</b> current carrying capacity installed in <b>exactly the same</b> location (identical route).	NP

<b>CONSUMER'S MAINS – UNDERGROUND ELECTRIC LINES</b>	
Repair to conductor insulation or conductor (e.g. joint in conductor at junction box).	NP
The replacement of consumer's mains by use of a <b>similar wiring system</b> of the <b>same</b> current carrying capacity installed in exactly the <b>same</b> location (identical route).	NP

<b>MAIN EARTHING SYSTEM</b>	
Disconnection/reconnection of existing conductor termination at earth electrode.	NP
Repair to earthing conductor.	NP
Replacement of a single earth conductor of the <b>same</b> size and in the <b>same</b> location.	NP
Replacement of a single earth electrode in <b>same</b> location (includes installing an earth electrode where the water pipe had been used as the earth electrode).	NP

<b>METER ENCLOSURE AND CUSTOMER PROVIDED EQUIPMENT (EQUIPMENT NOT OWNED BY ELECTRICITY SUPPLIER)</b>	
Replacement of a single meter only enclosure in <b>same</b> location.	NP
Replacement of a single meter panel in <b>same</b> location.	NP

<b>METERING EQUIPMENT (EXCEPT FOR METERING EQUIPMENT OWNED AND INSTALLED BY A MEC)</b>	
Installation of meter equipment	NP
Replacement of meter equipment in the same location	NP
Installation of Current Transformers	NP
Replacement of Current Transformers in the same location	NP
Disconnection and Reconnection of meter equipment for testing purposes	NP
Disconnection and Reconnection of Current Transformer(s) for testing purposes	NP

<b>CONSUMER'S MAINS – PRIVATE AERIAL LINES</b>	
Repair to a single severed or damaged overhead conductor (e.g. approved joint in conductor).	NP
Restraining a single overhead conductor.	NP
Replacement of a single component of aerial hardware (e.g. one insulator, one cross-arm brace, one stay or one pole cap, breakaway device etc.).	NP
Re-securing a single component of aerial hardware (e.g. tightening insulators, cross-arm braces, struts, pole caps etc.).	NP
Replacement of <b>more</b> than 20% of overhead conductor by use of a <b>similar wiring system</b> in the <b>same</b> route location in a high bushfire risk area – <i>only where permitted by an ESV emergency restoration.</i>	NP
Replacement of <b>less</b> than 20% of overhead conductor by use of a <b>similar wiring system</b> in the <b>same</b> route location in a high bushfire risk area.	NP
Replacement of a single circuit protective device of <b>same</b> current carrying capacity in the <b>same</b> location (e.g. circuit breaker, fused mains box).	NP
Replacement of a single pole in the <b>same</b> location, which constitutes <b>less</b> than 20% of the total number of poles in the line in a high bushfire risk area.	NP
Replacement of a single pole in the <b>same</b> location, which constitutes <b>more</b> than 20% of the total number of poles in the line in a high bushfire risk area – <i>only where permitted by an ESV emergency restoration.</i>	NP
Replacement of a single cross arm.	NP

<b>SWITCHBOARD – MAIN (INCLUDING SWITCHBOARDS INSTALLED IN INDIVIDUAL OCCUPANCIES OF MULTIPLE INSTALLATIONS)</b>	
Replacement of one main switch with another switch of the <b>same</b> current rating in the same location (this includes when a main switch is replaced with a circuit breaker that is correctly rated to provide over current protection of the consumers mains).	NP
Replacement of the main neutral link or bar with another link or bar of the <b>same</b> current carrying capacity in the <b>same</b> location.	NP
Repair of a consumer's mains conductor termination (i.e. on the line side of a main switch or at a neutral link).	NP
Replacement of a single surge protection device with an equivalent surge protection device on the line side of a main switch in the same location.	NP
Installation of one single surge protection device with an equivalent surge protection device on the load side of a main switch in the same location.	NP

<b>EQUIPMENT IN HAZARDOUS AREAS (INCLUDING PROTECTION EQUIPMENT ASSOCIATED WITH HAZARDOUS AREAS)</b>	
Repair to conductor insulation or conductor in hazardous areas (e.g. joint in conductor).	NP
Repair to conductor connection at electrical equipment in hazardous areas.	NP
Replacement of a single component of electrical equipment of the <b>same</b> current rating and/or hazardous area classification characteristics where the cable termination does not involve re-routing of the original cable - <i>where permitted in accordance with AS/NZS 60079.14.</i>	NP
Replacement of a single control, isolation or protection device of the <b>same</b> current rating and/or hazardous area classification characteristics in the <b>same</b> location - <i>where permitted in accordance with AS/NZS 60079.14.</i>	NP
Replacement of a single component of protection equipment associated with hazardous areas of the <b>same</b> current rating in <b>same</b> location - <i>where permitted in accordance with AS/NZS 60079.14.</i>	NP

<b>HIGH VOLTAGE EQUIPMENT</b>	
Installation of metering equipment	NP
Replacement of metering equipment	NP
Repair to high voltage conductor insulation or conductor.	NP
Repair to high voltage conductor connection at equipment.	NP
Replacement of a single component of high voltage electrical equipment of the <b>same</b> current rating where the cable termination does not involve re-routing of the original cable (e.g. HV motor with terminal box on motor in same location)	NP
Replacement of a single component of high voltage electrical equipment of the <b>same</b> current rating, <b>same</b> fault level rating and <b>same</b> protection characteristics (e.g. circuit breaker).	NP
Replacement of a single component of high voltage control, isolation or protection device of the <b>same</b> current rating in the <b>same</b> location.	NP
Replacement of a section of high voltage cable by use of a <b>similar wiring system</b> of the <b>same</b> current carrying capacity and <b>same</b> fault level rating in exactly the <b>same</b> location (identical route).	NP
Replacement of one of the following components of high voltage equipment of the <b>same</b> current carrying capacity and fault level rating (where applicable) in the same location: <ul style="list-style-type: none"> <li>• Lightning Arrester</li> <li>• Overhead conductor support structure</li> <li>• Overhead conductor support structure cross-arm</li> <li>• Fuse assembly</li> <li>• Transformer</li> <li>• Insulator</li> <li>• Power factor correction equipment (capacitor bank)</li> <li>• Insulating mediums (oil) within transformer, circuit breaker, capacitor bank etc.</li> </ul>	NP
Replacement of commutator brushes on high voltage motor – by use of tools.	NP
Replacement of slip rings on high voltage motor.	NP
Maintenance of slip rings or commutator/s on high voltage motor.	NP

<b>STANDBY, ALTERNATIVE AND SUPPLEMENTARY SUPPLIES</b>	
The replacement of a section of an <b>identical wiring system</b> of the <b>same</b> current carrying capacity installed in exactly the <b>same</b> location (identical route).	NP
Repair to conductor insulation or conductor.	NP
Repair to conductor connection at electrical equipment.	NP
Replacement of a single component of electrical equipment of <b>same</b> current rating in the <b>same</b> location (e.g. protection, control, etc.).	NP
Replacement of a single inverter with an equivalent inverter of the same rating and capacity in the same location. (e.g., Manufacturer equivalent)	NP
Replacement of a single Photovoltaic panel with an equivalent single Photovoltaic panel of the same rating and capacity in the same location. (e.g., Manufacturer equivalent)	NP

<b>BATTERY ENERGY STORAGE SYSTEMS (BESS)</b>	
Repair to conductor connection at electrical equipment.	NP
Replacement of a single component of electrical equipment of <b>same</b> current rating in the <b>same</b> location (e.g. protection, control, etc.).	NP
Repair to conductor insulation or conductor.	NP
The replacement of a section of a <b>similar wiring system</b> of the <b>same</b> current carrying capacity installed in exactly the <b>same</b> location (identical route).	NP
Replacement of a single preassembled integrated BESS with an equivalent single sealed preassembled integrated BESS of the same rating and capacity in the same location.	NP
Replacement of a single preassembled battery system with an equivalent single sealed preassembled battery system of the same rating and capacity in the same location.	NP
Replacement of a single battery module or cell with an equivalent single battery module or cell of the same rating and capacity in the same location.	NP

<b>ELECTRIC FENCES (SECURITY PURPOSES)</b>	
Repair to conductor insulation or conductor.	NP
Repair to conductor connection at electrical equipment.	NP
Replacement of a single component of electrical equipment of <b>same</b> current rating in the <b>same</b> location (e.g. energizers, ancillary, protection, control equipment, etc.).	NP
The replacement of a section of cable by use of a <b>similar wiring system</b> of the <b>same</b> current carrying capacity installed in exactly the <b>same</b> location (identical route).	NP
Replacement of fence in <b>same</b> location.	NP
Installation or alteration of physical barrier in <b>same</b> location.	NP
Replacement of physical barrier in <b>same</b> location.	NP

<b>ELECTRO MEDICAL EQUIPMENT</b>	
Repair to conductor insulation or conductor.	NP
Repair to conductor connection at electrical equipment.	NP
Replacement of one component of electrical equipment of <b>same</b> current rating in exactly the <b>same</b> location (e.g. socket outlet, residual current device, line isolation monitor, circuit breaker, isolating switch, isolating transformer, EP terminal, theatre lighting, etc.).	NP